

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
Alexandria Division**

|                                                  |   |                            |
|--------------------------------------------------|---|----------------------------|
| STEPHEN THALER,                                  | ) |                            |
|                                                  | ) |                            |
| Plaintiff,                                       | ) |                            |
|                                                  | ) |                            |
| vs.                                              | ) | Civil Action No. 1:20cv903 |
|                                                  | ) |                            |
| ANDREW HIRSHFELD,                                | ) |                            |
| Performing the Functions and                     | ) |                            |
| Duties of the Under Secretary of                 | ) |                            |
| Commerce for Intellectual Property               | ) |                            |
| and Deputy Director of the United                | ) |                            |
| States Patent and Trademark Office, <sup>1</sup> | ) |                            |
| <i>et al.</i> ,                                  | ) |                            |
|                                                  | ) |                            |
| Defendants.                                      | ) |                            |
|                                                  | ) |                            |

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**MEMORANDUM OF LAW IN SUPPORT OF DEFENDANTS' MOTION FOR  
SUMMARY JUDGMENT & IN OPPOSITION TO PLAINTIFF'S MOTION FOR  
SUMMARY JUDGMENT**

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<sup>1</sup>Pursuant to 35 U.S.C. § 3, the powers and duties of the U.S. Patent and Trademark Office are vested in an Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office. Effective January 20, 2021, Andrei Iancu resigned as Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office, and Andrew Hirshfeld began performing the functions and duties of the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. Accordingly, the named defendant for the subject civil action has changed. *See* FED. R. Civ. P. 25(d)(1).

## **INTRODUCTION**

In the Patent Act, Congress explicitly defined the term “inventor” to be an “individual,” and then in subsequent statutory provisions referred to such an “individual” using personal pronouns. And as such, in published opinions that are binding in this civil action, the Federal Circuit – consistent with Supreme Court authority on the plain statutory meaning of “individual” – has held that an “inventor” of subject-matter on which one seeks to obtain patent protection must be a “natural person” (*i.e.*, a “human being”). In rejecting plaintiff’s request for an artificial intelligence machine to be an “inventor” under the Patent Act, the USPTO was merely applying Congress’s plain language and the Federal Circuit’s construction of the same, as it is obligated to do.

Plaintiff now asks this Court to ignore this plain statutory language and Federal Circuit authority, based solely on his own assessment of the intellectual property policy that the United States should adopt with respect to artificial intelligence. But the Supreme Court and Federal Circuit have repeatedly held that such policy assessments – whatever their ultimate merit – have no place in the judicial exercise of statutory construction, and belong instead in the halls of Congress. In short, plaintiff seeks to rewrite the Patent Act, something that neither this Court nor the USPTO is authorized to do. This Court should therefore affirm the USPTO’s underlying petition decision, and enter summary judgment in favor of defendants.

## **STATUTORY & REGULATORY BACKGROUND**

As plaintiff essentially concedes in his opening summary judgment memorandum, the sole issue presented in this action is a pure question of law: Can something other than a natural person be named as the inventor on a patent application? Before moving to the administrative proceedings in which the United States Patent and Trademark Office (“USPTO”) answered this

question – in the detailed written decision that plaintiff challenges here – it is important to provide a brief explanation of the statutory and regulatory provisions on which this question must be resolved. As will be seen below, the Patent Act is replete with explicit language to the effect that that inventor named in a patent application must be a natural person.

**I.       THE “INVENTOR”**

This civil action exclusively concerns the concept of inventorship, which has been a significant part of patent law for more than a century:

The patent law makes it essential to the validity of a patent that it shall be granted on the application, supported by the oath, of the original and first inventor, or of his executor or administrator, whether the patent is issued to him or to his assignee. A patent which is not supported by the oath of the inventor . . . is unauthorized by law and void, and, whether taken out in the name of the applicant or of any assignee of his, confers no rights as against the public.

*Kennedy v. Hazelton*, 128 U.S. 667, 672 (1888). But this is not merely a relic of a bygone era of legal authority. Far to the contrary, Congress included this fundamental principle in its modern codification of the Patent Act, and it continues to be a significant part of the patent application process.

a.       Utilizing the legislative authority provided by the Constitution’s Patent Clause, *see U.S. CONST. art. I, § 8, cl. 8*, Congress initially codified the Patent Act in 1952, *see Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 180 (1980), and has amended the Patent Act a number of times in the ensuing sixty years. In 2011, Congress promulgated the America Invents Act (“AIA”), which Congress described as legislative action “to ensure that the patent system in the twenty-first century reflects the constitutional imperative” of the Patent Clause to further innovation, and “to correct flaws in the system” that it had identified. H.R. RPT. 112-98, at 68-69 (June 1, 2011). Of particular import here, the AIA formally amended the Patent Act to provide an explicit statutory definition for the term “inventor”:

The term “inventor” means the *individual*, or, if a joint invention, the *individuals* collectively who invented or discovered the subject matter of the invention.

35 U.S.C. § 100(f) (emphasis added). The AIA also added a definition for “joint inventor.” *See id.* § 100(g) (defining term to “mean any one of the *individuals* who invented or discovered the subject matter of a joint invention” (emphasis added)).

b. More tangibly, Congress has required that one who seeks a patent on a particular invention must file a written application with the USPTO. *See* 35 U.S.C. § 111(a). That application must contain three things. *See id.* § 111(a)(2). *First*, the application must contain a “specification,” *see id.* § 111(a)(2)(A), or “a written description of the invention” that “concludes with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention,” *id.* §§ 112(a)-(b). *Second*, the application must contain any necessary drawings of the invention. *See id.* §§ 111(a)(2)(B); 113. *Third*, the application must include “the name of the inventor for any invention,” *id.* § 115(a), and “an oath or declaration by the inventor” to the effect that he or she “believes *himself or herself* to be the original inventor or joint inventor of [the] claimed invention,” *see id.* §§ 115(a); (b)(2) (emphasis added); *see also id.* § 111(a)(2)(C).

The Patent Act does provide a slight exception to these mandates, allowing an applicant to submit a “substitute statement” to the USPTO “in lieu of” of the oath or declaration that is typically required from the inventor. *See id.* § 115(d)(1). The express statutory language codifying this exception tracks the Patent Act’s definition of “inventor”:

A substitute statement under paragraph (1) is permitted with respect to *any individual who*—

- (A) is unable to file the oath or declaration under subsection (a) because *the individual*—
  - (i) is deceased;

- (ii) is under legal incapacity; or
  - (iii) cannot be found or reached after diligent effort; or
- (B) is under an obligation to assign the invention but has refused to make the oath or declaration required under subsection (a).

*Id.* § 115(d)(2) (emphasis added). And similarly, the statute requires that any “substitute statement” must “identify *the individual* to whom the statement applies” as well as the circumstances triggering the exception to the oath or declaration requirement. *Id.* § 115(d)(3) (emphasis added).

## **II. REVIEW OF PATENT APPLICATIONS**

Upon the filing of a patent application, the USPTO will initially review that application – before forwarding it to a patent examiner for substantive examination – to ensure that it contains all of the required parts described above. *See Ariad Pharms., Inc. v. Matal*, 283 F. Supp. 3d 503, 505 (E.D. Va. 2018). If the application is missing one of the required parts, the USPTO will issue to the applicant a “Notice to File Missing Parts,” which identifies the particular deficiency of the application, and provides the applicant a period of time within which to remedy the problem. *See* 37 C.F.R. § 1.53(f)(1). Should the applicant not heed this warning and fail to submit the missing part (or parts), the USPTO will deem the application abandoned. *See id.*

An applicant may, however, challenge the validity of the USPTO’s conclusion – articulated through a “Notice to File Missing Parts” – that an application failed to comply with the relevant procedural requirements. Pursuant to federal regulation, the applicant may file an administrative petition asking the USPTO Director to exercise his “supervisory authority” over a given set of circumstances. *See* 37 C.F.R. § 1.181(a)(3). The USPTO Director has delegated his authority to decide such petitions, *see id.* § 1.181(g), to what was (at the time of the petition

decision at issue here) the Office of the Deputy Commissioner for Patent Examination Policy, *see Manual of Patent Examination Policy* (“MPEP”) ¶1002.02(b).

### **UNDISPUTED MATERIAL FACTS**

#### **I. GENERAL PRINCIPLES**

The APA confines review of Executive Branch action to the administrative record of proceedings before the pertinent agency. *See* 5 U.S.C. § 706; *Camp v. Pitts*, 411 U.S. 138, 142 (1973). Accordingly, as one court has noted, “when a party seeks review of agency action under the APA [before a district court], the district judge sits as an appellate tribunal.” *Am. Bioscience, Inc. v. Thompson*, 269 F.3d 1077, 1083 (D.C. Cir. 2001). “[T]here can be no genuine issue of material fact” in an APA action, *R.R. Donnelly & Sons Co. v. Dickinson*, 123 F. Supp. 2d 456, 458 (N.D. Ill. 2000) – *i.e.*, a particular “fact” is either reflected in the administrative record of agency proceedings, or is not – and “[t]he entire case on review is a question of law, and only a question of law.” *Marshall County Health Care Auth. v. Shalala*, 988 F.2d 1221, 1226 (D.C. Cir. 1993).

One therefore might question whether a statement of undisputed material facts (or a listing of those “facts” identified by plaintiff that defendants “dispute”) is even necessary in the APA context. *Cf. Maine v. Norton*, 257 F. Supp. 2d 357, 372 (D. Me. 2003) (recognizing that “the parties’ statements of material facts take on a different role in an APA case”). Plaintiff has, however, provided a statement of what he terms “material facts,” which represents a discussion of what he believes the administrative record discloses about the events surrounding the Applications and the USPTO’s actions regarding the same. *Pl. Mem.* (Dkt. No. 19), at 2-8. Given the dictates of Local Rule 56(B), the USPTO provides its own fact statement below, followed by a brief comment on plaintiff’s factual recitation.

## II. USPTO'S STATEMENT

The instant action concerns two patent applications that plaintiff filed with the USPTO, which were assigned U.S. Application Serial Nos. 16/524,350 and 16/524,532 (collectively, “the Applications”). Because the administrative proceedings that occurred with respect to the Applications were identical (including the dates on which pertinent events occurred), the following factual statement will treat the Applications collectively, also provide citations to the administrative record that the USPTO has filed with respect to both applications.

### A. THE APPLICATIONS

1. Plaintiff filed the Applications with the USPTO on July 29, 2019. A1-96; 284-379.
2. In an Application Data Sheet accompanying the Applications,<sup>2</sup> plaintiff identified the inventor’s “given name” as “DABUS,” and additionally stated that the “invention [was] generated by artificial intelligence.” Plaintiff identified his own mailing address as the “mailing address of inventor.” A10; 299.
3. Plaintiff also included with the Applications a written “Statement on Inventorship,” in which he explained why – in his subjective view – DABUS should be considered an appropriate “inventor” under the Patent Act and the USPTO’s regulations. A60-65; 345-50.

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<sup>2</sup>The USPTO’s regulations provide that, “[i]f an application data sheet is provided, the application data sheet is part of the application for which it has been submitted.” 37 C.F.R. § 1.76(a). That “Data Sheet” must include, *inter alia*, “the legal name, residence, and mailing address of the inventor or each joint inventor.” *Id.* § 1.76(b)(1).

a. Plaintiff confirmed that DABUS was, in fact, a machine; more specifically, it was “a particular type of connectionist artificial intelligence” known as a “Creativity Machine.” A61; 346.

b. Plaintiff then argued that because Congress had not “seriously considered autonomous machine invention” before limiting “inventorship to individuals,” the USPTO should define the term “inventor” to include a machine. Plaintiff also offered his subjective view that defining the term “inventor” to include a machine would “encourage innovation.” A62-63; 347-48.

4. Because DABUS – as a machine – could not execute the necessary oath or declaration that the Patent Act requires of the inventor, plaintiff included with the Applications his own statement as a substitute. That statement provided that the “inventor,” DABUS, was “under legal incapacity in view of the fact that the sole inventor is a Creativity Machine (*i.e.*, an artificial intelligence), with no legal personality or capability to execute this substitute statement.” A26-27; 311-12.

5. Finally, the Applications also included a document through which DABUS had ostensibly assigned all intellectual property rights in the claimed invention to plaintiff. That assignment document provided as follows, in pertinent part:

DABUS, the Creativity machine that has produced the below-detailed invention, as the sole inventor (represented in this assignment by its owner, Stephen L. Thaler, hereinafter called the “Assignor”), hereby assigns and transfers to:

Stephen L. Thaler  
[Address Omitted]

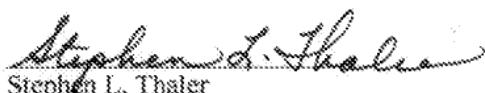
(hereinafter called the “Assignee”), its successors, assignees, nominees, or other legal representatives, the Assignor’s entire right, title, and interest, including, but not limited to, copyrights, trade secrets, trademarks and associated good will and patent rights in the Invention and the registrations to the invention . . . .

The assignment document ended with the following:

In view of the fact that the sole inventor is a Creativity Machine, with no legal personality or capability to execute said assignment, and in view of the fact that the assignee is the owner of said Creativity Machine, this Assignment is considered enforceable without an explicit execution by the inventor. Rather, the owner of DABUS, the Creativity Machine, is signing this Assignment on its behalf.

Similarly, DABUS, being a machine and having no legal personality, does not have the capability to receive any consideration, and therefore, Stephen L. Thaler, as its owner/representative, acknowledges the receipt and sufficiency of good and valuable consideration for this assignment.

Signed and sealed this 23rd day of July 2019,



Stephen L. Thaler  
On behalf of DABUS,  
Assignor



Stephen L. Thaler  
Assignee

A21; 310.

**B. USPTO'S DECISION ON THE DEFINITION OF THE STATUTORY TERM "INVENTOR"**

6. After its initial review of the Applications, the USPTO issued to plaintiff a “Notice to File Missing Parts of Non-Provisional Application.” In that notice, the USPTO provided plaintiff two months to submit proper information regarding inventorship because the “application data sheet or inventor’s oath or declaration does not identify each inventor or his or her legal name.” A97-98; 380-81.

7. On August 29, 2019, plaintiff instead filed a petition with the USPTO Director pursuant to 37 C.F.R. § 1.181. Plaintiff’s petition essentially asked the USPTO to vacate its “Notice to File Missing Parts,” and in support of this relief, essentially reiterated the exact terms of the “Inventorship Statement” that he had submitted with the Applications. A111-16; 394-99.

8. The USPTO issued a written decision on plaintiff’s petition on December 17, 2019. In its decision, the USPTO primarily explained that the explicit statutory language that Congress has used to define the term “inventor” – *e.g.*, “individual” and “himself or herself” –

were uniquely trained on human beings. The USPTO also noted that the Federal Circuit had twice held that an inventor could only be a natural person. And thus, “[b]ecause a machine does not qualify as an inventor,” the USPTO concluded that it had “properly issued the Notice . . . noting the inventor was not identified by his or her legal name.” A131-33 (quoting *Univ. of Utah v. Max-Planck-Gesellschaft*, 734 F.3d 1315, 1323 (Fed. Cir. 2013); *Beech Aircraft Cop. v. Edo Corp.*, 990 F.2d 1237, 1248 (Fed. Cir. 1993)); A409-13.

9. On January 20, 2020, plaintiff sought reconsideration of the USPTO’s earlier petition decision. That request did not identify any contrary statutory provisions within the Patent Act or Federal Circuit authority to support plaintiff’s desired definition of “inventor.” Instead, plaintiff reiterated (almost verbatim) the same policy rationales found in his “inventorship statement” and original petition, and added statements about the consideration of the same applications by the USPTO’s sister agencies in the European Union and the United Kingdom. Although plaintiff openly recognized that both the European Union and the United Kingdom had concluded that *their* patent law precluded “the naming of an inventor that is not a natural person,” he argued that the USPTO should conclude differently – not because Congress had promulgated different statutory language requiring a different result, but because the “United Kingdom Intellectual Property Office . . . agreed that the making of inventions by AI systems is a current and serious issue that must be debated.” A135-46; 414-25.<sup>3</sup>

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<sup>3</sup>The United Kingdom’s High Court of Justice has since affirmed the United Kingdom Intellectual Property Office’s conclusion that only a “natural person” can be an “inventor” under the United Kingdom’s “Patents Act 1977” – with respect to the very same application that is at issue here was not eligible for issuance as a patent. See *Thaler v. Comp. Gen. of Patent, Designs, & Trademarks*, [2020] EWHC 2412 (Pat.) (Sept. 21, 2020), available at << [<< https://www.bailii.org/ew/cases/EWHC/Patents/2020/2412.html>>](https://www.bailii.org/ew/cases/EWHC/Patents/2020/2412.html) (visited Feb. 21, 2021).

10. USPTO denied plaintiff's request for reconsideration in a detailed written decision – the decision that plaintiff challenges in this civil action<sup>4</sup> – issued on April 22, 2020. A205-13; 456-64.

a. The USPTO again primarily pointed to the explicit statutory language that Congress utilized to define “inventor” in the Patent Act – including, *inter alia*, “individual” and “himself or herself” within 35 U.S.C. §§ 100; 115 – to conclude that “interpreting ‘inventor’ broadly to encompass machines would contradict the plain meaning of the patent statutes that refer to persons and individuals.” A209; 460.<sup>5</sup>

b. The USPTO additionally reiterated that the Federal Circuit had repeatedly held “that the patent laws require that an inventor be a natural person,” and rejected plaintiff’s position that this binding decisional authority could only apply to the limited question of whether *corporate entities* could be an inventor under the relevant statute. A209-10; 460-61.

c. Finally, the USPTO concluded that, whatever their putative merit, plaintiff’s asserted policy considerations were simply irrelevant under Federal Circuit authority because they could “not overcome the plain language of the patent laws as passed by the

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<sup>4</sup>Although not material to the resolution of this action, it bears noting that plaintiff incorrectly refers to the USPTO’s final petition decision as “Rejections.” *Pl. Mem.*, at 1. Patent law views the term “rejection” as a term of art referencing the USPTO’s substantive evaluation of whether the *subject-matter* referenced in a patent application is eligible for a patent. *See, e.g.*, 35 U.S.C. § 132(a). If the USPTO’s final petition decision was, in fact, a “rejection,” then plaintiff could only seek Article III judicial review after noticing an administrative appeal to the Patent Trial and Appeal Board through the exclusive statutory scheme that Congress created. *See, e.g., Pregis Corp. v. Kappos*, 700 F.3d 1348, 1356-61 (Fed. Cir. 2012) (holding that patent applicant could not seek judicial review of a USPTO examiner’s rejections of a patent application in federal district court under the APA).

<sup>5</sup>The USPTO also explained that this very same principle – *i.e.*, that only a natural person could be an “inventor” – was “reflected” through the formal regulations that the agency had promulgated pursuant to the Patent Act, as well as its own *Manual of Patent Examining Procedure* (“MPEP”). A210-11; 461-63.

Congress and as interpreted by the courts.” A212; 463 (citing *Glaxo Ops. UK Ltd. v. Quigg*, 894 F.2d 392 (Fed. Cir. 1990)).

## **II. PLAINTIFF’S STATEMENT**

The USPTO does not dispute any of the actual facts articulated in plaintiff’s material fact statement and will address any potentially-material legal arguments or conclusions that are interspersed within that fact statement below.

## **ARGUMENT**

### **I. GENERAL STANDARDS**

#### **A. REVIEW UNDER THE ADMINISTRATIVE PROCEDURE ACT**

Plaintiff seeks Article III judicial review of the USPTO’s final petition decision in this Court under the provisions of the Administrative Procedure Act (“APA”). *Complaint* (Dkt. No. 1), ¶¶68-71. As plaintiff ostensibly concedes, *Pl. Mem.*, at 9, APA judicial review is circumscribed, *see Motor Vehicles Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), and this Court may “set aside” an agency action only if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” 5 U.S.C. § 706(2)(A). As the Federal Circuit<sup>6</sup> has held:

A court reviewing the agency decision “must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.”

*Burandt v. Dudas*, 528 F.3d 1329, 1332 (Fed. Cir. 2008) (quoting *Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 285 (1974)).

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<sup>6</sup>Because this case arises under the Patent Act, this Court receives its binding authority here from the decisions of the Federal Circuit. *See, e.g., iControl Networks, Inc. v. Alarm.com, Inc.*, 2013 WL 9838105, at \*2-3 (E.D. Va. Dec. 11, 2013) (Brinkema, J.).

**B. SKIDMORE DEFERENCE**

The USPTO’s interpretation of the various provisions of the Patent Act at issue here – primarily 35 U.S.C. §§ 100 and 115 – is also entitled to deference from this Court pursuant to the Supreme Court’s decision in *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944). *Skidmore* requires courts to accord significant deference to agency interpretations of statutory provisions that fall within its particular bailiwick to the extent that those decisions have the power to persuade. *See id.* at 140. In determining whether to provide this type of judicial deference to an agency, courts look to the validity of the agency’s reasoning, the decision’s consistency with earlier and later pronouncements,<sup>7</sup> the thoroughness of the decision, and any additional other relevant factors. *See id.; see also Cathedral Candle Co. v. ITC*, 400 F.3d 1352, 1366 (Fed. Cir. 2005) (“[W]e believe the Supreme Court intends for us to defer to an agency interpretation of the statute that it administers if the agency has conducted a careful analysis of the statutory issue, if the agency’s position has been consistent and reflects agency-wide policy, and if the agency’s position constitutes a reasonable conclusion as to the proper construction of the statute, even if we might not have adopted that construction without the benefit of the agency’s analysis.”). As will be seen below, each of these factors weigh easily in favor of deference.

**II. THE PLAIN LANGUAGE OF THE PATENT ACT EQUATES “INVENTOR” WITH A “HUMAN BEING” OR “NATURAL PERSON”**

There can be little doubt that the sole issue presented in this action – *i.e.*, whether the necessary “inventor” of subject-matter sought to be patented must be a human being – is a

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<sup>7</sup>In this respect, plaintiff reflexively states that “*Skidmore* deference is not warranted because the [US]PTO’s interpretation is neither persuasive *nor consistent*.” *Pl. Mem.*, at 16 (quoting *Photocure ASA v. Kappos*, 603 F.3d 1372, 1376 (Fed. Cir. 2010) (emphasis added)). But plaintiff identifies not one contrary decision from the USPTO on the meaning of “inventor” under the Patent Act, let alone one concluding that Congress intended the term to encompass a non-natural entity such as a machine.

question of statutory construction. And on that score, the Supreme Court has been crystal clear that courts (as well as executive agencies) must look to the plain language of the relevant statute:

The preeminent canon of statutory interpretation requires us to “presume that [the] legislature says in a statute what it means and means in a statute what it says there.” Thus, our inquiry begins with the statutory text, and ends there as well if the text is unambiguous.

*BedRoc Ltd., LLC v. United States*, 541 U.S. 176, 183 (2004) (quoting *Connecticut Nat. Bank v. Germain*, 503 U.S. 249, 253-54 (1992)); *see also Shoshone Indian Tribe v. United States*, 364 F.3d 1339, 1345 (Fed. Cir. 2004) (“The plain language of a statute is controlling.”).

Despite this massive body of decisional authority, plaintiff’s opening memorandum barely mentions the express language that Congress placed into the Patent Act – whether in explicitly defining “inventor” or otherwise. Instead, over the course of his near-thirty page opening memorandum, plaintiff casts this language aside in essentially a single paragraph, *Pl. Mem.*, at 16-17, electing instead to rest his position on the issue presented here on arguments about the proper course of patent policy. There is a good reason that plaintiff attempts to avoid any searching review of the Patent Act’s plain language – that language unequivocally leads to the conclusion that only a natural person can be an “inventor” under the Patent Act. And it is for that reason that the Federal Circuit has held that an inventor must be a “*natural* person.” *See, e.g., Univ. of Utah v. Max-Planck Gesellschaft*, 734 F.3d 1315, 1323 (Fed. Cir. 2013).

**A. THE PLAIN MEANING OF “INDIVIDUAL” IS “HUMAN BEING”**

Congress provided an explicit definition for the terms “inventor” and “joint inventor” within the Patent Act, both of which unequivocally reference an “individual” or “individuals”:

- (f) The term “inventor” means the *individual* or, if a joint invention, the *individuals* collectively who invented or discovered the subject matter of the invention.
- (g) The terms “joint inventor” and “coinventor” mean any 1 of the *individuals* who invented or discovered the subject matter of a joint invention.

35 U.S.C. §§ 100(f)-(g) (emphasis added). Congress used the same statutory language – “individual” – in the other significant provision of the Patent Act that references an “inventor”:

An application for patent that is filed under section 111(a) or commences the national stage under section 371 shall include, or be amended to include, the name of the inventor for any invention claimed in the application. Except as otherwise provided in this section, each *individual* who is the inventor or a joint inventor of a claimed invention in an application for patent shall execute an oath or declaration in connection with the application.

*Id.* § 115(a)(1) (emphasis added); *see also id.* § 115(b)(2) (providing that “[a]n oath or declaration . . . shall contain statements that . . . such *individual* believes *himself or herself* to be the original inventor or an original joint inventor of a claimed invention in the application”) (emphasis added)). And thus, the issue before this Court turns on the plain meaning of the statutory term “individual.”

1. Courts, including the Supreme Court, have repeatedly held that Congress’s use of the term “individual” in a given statute denotes a “human being,” as opposed to other things. The Supreme Court recently conducted this very statutory construction analysis with respect to Congress’s use of “individual” in the Torture Victim Protection Act (“TVPA”). *See Mohamad v. Palestinian Auth.*, 566 U.S. 449, 453-61 (2012). *Mohamad* provides a point-by-point application of the canons of statutory construction through which Congress’s identical use of the term “individual” in the Patent Act must be viewed.

*First*, the *Mohamad* Court recognized that because the TVPA – like the Patent Act – “does not define the term ‘individual,’ we look first to the word’s ordinary meaning.” *Id.* at 454. Quoting from several well-known dictionaries, the Court held that when used “[a]s a noun, ‘individual’ ordinarily means ‘[a] human being, a person.’” *Id.* (quoting 7 OXFORD ENGLISH DICTIONARY 880 (2d ed. 1989)). *Second*, the Court recognized that in “everyday parlance,”

English speakers use “individual” to “refer[] unmistakably to a natural person.” *Id.*; *see also Bostock v. Clayton County*, 140 S. Ct. 1731, 1750 (2020). *Third*, the Court noted that the Dictionary Act, *see* 1 U.S.C. § 1, provides that the legislative use of the term “individual” denotes something separate and apart from non-human beings. *See Mohamad*, 566 U.S. at 454. *Fourth*, the Court explained that although Congress “remains free . . . to give the word a broader or different meaning,” Congress must have provided some affirmative “indication [that it] intended such a result.” *Id.* at 455. And with respect to the TVPA, given the numerous adjacent placements of the same word in the same statute, “the statutory context strengthens – not undermines – the conclusion that Congress intended” only to reference “natural persons” through the term “individual” in the relevant section. *Id.*

Each of these interpretative points is equally applicable to the Patent Act as it is to the TVPA. *First*, the Patent Act undoubtedly uses the term “individual” as a noun, and thus, as in *Mohamad*, it should be construed consistent with its plain meaning – *i.e.*, “a human being.” *Second*, just as the *Mohamad* Court noted that “no one . . . refers in normal parlance to an organization as an ‘individual,’” *Mohamad*, 566 U.S. at 454, it is equally true that “no one . . . refers in normal parlance” to a machine as an “individual.” *Third*, the entire point of the Dictionary Act is that it applies to *all* congressional enactments, *see Ngiraingas v. Sanchez*, 495 U.S. 182, 190 (1990), which would thus include the Patent Act. And *fourth*, just as in *Mohamad*, the context in which Congress used the term “individual” in the Patent Act “strengthens – not undermines” its reference to a “human being.” As stated above, Congress provided that in executing the oath or declaration that must accompany a patent application, the inventor must testify that “such *individual* believes *himself or herself* to be the original inventor or an original joint inventor of a claimed invention in the application.” 35 U.S.C. § 115(b)(2) (emphasis

added). By using *personal pronouns* in the same statutory provision – indeed, in adjacent terms that serve to modify the term “individual” – Congress only strengthened the conclusion that it was referring to a “human being” in referencing an “individual.” *See Webster’s New Int’l Dictionary* 571 (defining “himself” as a pronoun meaning “that identical male one”); *see also Gustafson v. Alloyd Co.*, 513 U.S. 561, 575 (1995) (recognizing that courts “rely” on the doctrine known as *noscitur a sociis*, meaning that a “word is known by the company it keeps,” “to avoid ascribing to one word a meaning so broad that it is inconsistent with its accompanying words, thus giving ‘unintended breadth to the Acts of Congress’” (quoting *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303, 307 (1961))).

It is thus hardly surprising that the Federal Circuit has, in a published decision binding on this Court, construed Congress’s use of the term “individual” in the Patent Act to mean that “inventors must be natural persons.” *Max-Planck*, 734 F.3d at 1323; *see also Beech Aircraft Corp. v. EDO Corp.*, 990 F.2d 1237, 1248 (Fed. Cir. 1993) (same). Whether standing alone, or in conjunction with the Supreme Court’s analysis in *Mohamad*, these decisions preclude plaintiff’s argument that this Court should construe the Patent Act’s use of “individual” to mean anything other than a “natural person” (including, *inter alia*, a machine).

**B. PLAINTIFF’S NON-TEXTUAL POLICY ARGUMENTS CANNOT OVERCOME THE PLAIN MEANING OF THE TERM “INDIVIDUAL”**

Plaintiff engages in none of the textual analysis provided above; indeed, he does not attempt to define the actual statutory term that Congress used to describe an “inventor,” and does not point this Court to any alternative language within the Patent Act that would give *any* affirmative indication that Congress sought to deviate from the plain, everyday meaning of the term “individual.” Nor does plaintiff even suggest that construing the term “individual” to mean “human being” – as the Federal Circuit has already done – would somehow lead to “absurd

result[s]," and thus should be discarded. *See, e.g., Clinton v. City of New York*, 524 U.S. 417, 429 (1998). In lieu of this necessary textual analysis, plaintiff provides this Court with his own normative assessment of the policy that the United States – ostensibly, through this Court’s statutory construction analysis – should adopt with respect to inventions devised by machines using artificial intelligence.

As will be seen below, none of these policy positions have any impact on the proper resolution of the sole question raised here. The Supreme Court and the Federal Circuit have provided that such policy appraisals are irrelevant to statutory construction, and in any event, plaintiff’s policy-related commentary is untethered to anything other than his own speculation.

1. Without grappling with the actual text of the relevant Patent Act provisions, plaintiff initially casts the Federal Circuit’s decisions in *Max-Planck* and *Beech Aircraft* aside simply because those cases concerned whether the use of “individual” could be consistent with one *type* of non-natural person, an organization. *Pl. Mem.*, at 16-17. Although it is certainly true that the *precise* question at issue in both decisions (as it was in the Supreme Court’s opinion in *Mohamad*) was whether Congress’s use of the term “individual” could be construed to include an “organization,” there is simply no language in any of these decisions – and plaintiff identifies none – that would myopically limit the application of the holding that the term “individual” in the Patent Act’s definition of “inventor” must be interpreted to mean a “natural person.”<sup>8</sup>

And that is exactly the upshot of the Ninth Circuit’s recent analysis in *Animal Legal Defense Fund v. Dep’t of Agriculture*, 933 F.3d 1088 (9<sup>th</sup> Cir. 2019). There, the Ninth Circuit construed a portion of the Freedom of Information Act (“FOIA”) in which a requester may

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<sup>8</sup>Similarly, neither *Max Planck* nor *Beech Aircraft* provide any indication that policy arguments, such as the subjective reasoning that plaintiff offers in his opening memorandum, *Pl. Mem.*, at 17-18, played any role in the Federal Circuit’s conclusion that the term “individual” in the Patent Act must be construed to mean a “natural person.”

obtain “expedited processing” of a request for records if there is a “compelling need,” which the statute defines as a situation in which “a failure to obtain requested records on an expedited basis . . . could reasonably be expected to pose an imminent threat to the life or physical safety of an individual.” *Id.* at 1093 (quoting 5 U.S.C. § 552(a)(6)(E)(v)(I)). The requester in *Animal Legal* argued that the statutory term “individual” should be construed to include a living animal and not just a “human being”; the Ninth Circuit, employing the same analysis that the Supreme Court used in *Mohamad*, held otherwise. *See id.* at 1093-96.

First and foremost, the Ninth Circuit dispatched the very argument that plaintiff asserts here – that prior decisional authority only held that an “individual” could not be an organization, and left open the issue of whether “individual” could be construed as something other than a “human being”:

The [*Mohamad*] Court defined “individual” to mean “natural person” as opposed to an organization. Although *Mohamad* addressed a different statutory context, we find much of its reasoning applicable here.

*Id.* at 1093. And as this memorandum articulated above, the Ninth Circuit similarly looked to *Mohamad*’s survey of dictionaries and the Dictionary Act (as well as the APA itself), and concluded that it was “clear” that the term “individual” “could only be understood to refer to a human being” and not an animal. *Id.* at 1096 (holding that the “plain meaning of ‘individual,’ absent a context signifying otherwise, is ‘a human being, a person’”).

2. Plaintiff next provides an extensive discussion of why – in his view – allowing machines to be “inventors” would be consistent with Congress’ stated goal in promulgating the Patent Act to encourage “innovation.” *Pl. Mem.*, at 12-14. Plaintiff actually goes so far as to suggest, at the zenith of hyperbole, that “[t]he future of innovation is at stake in this case” alone, and that the Federal Circuit’s holding on the meaning of “inventor” to be a “natural person” – which the

USPTO followed here, as it is required to do – “impede[s] the progress of science.” *Id.* at 22. But other than a law review article that plaintiff’s counsel himself authored, plaintiff offers no support for his policy statements. *Id.* at 11-14. Even if the Supreme Court and the Federal Circuit had not already held that such lofty policy assessments are for Congress alone to evaluate, plaintiff’s own subjective speculation surely cannot override the plain language that Congress used in the Patent Act.

a. In this respect, plaintiff first asserts that this Court should depart from the plain meaning of the term “individual” – at least insofar as machines are concerned – because when Congress codified the Patent Act in 1952, it likely did not even consider (or could not have considered) the possibility that inventions could be created by machines utilizing artificial intelligence. *Id.* at 17-18 (quoting Karl F. Milde, Jr., *Can a Computer Be an “Author” or an “Inventor?”* 51 J. PAT. OFF. SOC’Y 378, 379 (1969) (“Congress, in considering the statute in 1952, simply overlooked the possibility that a machine could ever become an inventor.”)). Even if this were true, plaintiff has the analysis exactly backwards – in order to overcome the plain meaning of a statutory term, there must be some “indication” from Congress that it *affirmatively* intended a particular provision to be one of the “rare statute[s]” that contains a different meaning for the term “individual.” *See Mohamad*, 566 U.S. at 455. Put simply, the fact that Congress might have been naïve about a possible alternative construction of a given term has no impact on the statutory construction analysis, and requires a court to default to the plain meaning of that term.

But perhaps more importantly, it is not true that the “statutes relied upon by [the USPTO] were passed long before AI-Generated Inventions were a reality.” *Pl. Mem.*, at 17. Plaintiff’s statement in this regard is accompanied by a string citation of various statutes, *id.*; however, curiously missing from that listing is any reference to 35 U.S.C. §§ 100(f)-(g), which are the

statutory provisions in which Congress *expressly* defined “inventor” to be an “individual.” Congress added those provisions to the Patent Act not in 1952, but in *2011*, through the America Invents Act. *See* PUB. L. 112-29, § 3(a), 125 Stat. 285 (Sept. 16, 2011); *see also* H.R. RPT. 112-98 (June 1, 2011), *available at* 2011 U.S.C.C.A.N. 67, 67. Not only was artificial intelligence “a reality” in 2011, a White House official hailed the statute – at the time that President Obama signed it into law – as follows:

[I]n the past fifty years we have seen more technological advancements than in any point in history, with no comprehensive patent reform to keep up. The America Invents Act equips the USPTO to streamline and modernize its operations while strengthening [intellectual property] protections.

*Innovating Our System for Innovation*, 2011 WL 4842572, at \*1 (W.H. Sept. 16, 2011). Despite these “technological advancements,” Congress *inserted* plain language into the Patent Act that unequivocally is defined to include only “natural persons” as “inventors.”

b. Plaintiff’s additional policy assessments about how including machines that utilize artificial intelligence within the statutory ambit of “inventor” will spurn innovation bring him no closer to reversal of the USPTO’s decision here.<sup>9</sup> The simple and short answer to these normative considerations is that the Supreme Court and the Federal Circuit have held them to be singularly irrelevant, in circumstances in which a litigant sought judicial review over the USPTO’s statutory construction analysis:

Fisons makes what can only be characterized as a “policy argument” pointing to statements of lofty goals indicating that Congress broadly sought to encourage pharmaceutical innovation by enacting the 1984 Act. . . . It is irrelevant, however, that we

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<sup>9</sup>In this respect, plaintiff premises his policy arguments upon the so-called “Patent Clause” of the federal Constitution, which provides Congress with the “power” to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST., Art. I, § 8, cl.8. But as courts have recognized, as a part of Article I of the Constitution, the Patent Clause only provides Congress with *authority* to legislate, it does not *mandate* that Congress actually promulgate legislation. *See Powers v. USPTO*, 2005 WL 2456979, at \*2 (E.D. Va. Oct. 5, 2005) (citing *Bonito Boats v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989)).

might agree with Fisons that, as a matter of policy, Congress might better achieve its goals through a more liberal grant of patent term extension benefits. Matters of policy are for Congress, not the courts, to decide. Accordingly, Fisons' policy arguments are unhelpful in our interpretation of the complex statutory provision at issue.

*Fisons plc v. Quigg*, 876 F.2d 99, 101 (Fed. Cir. 1989); *see also Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1678 (2017) (“Even if we were persuaded that Amgen had the better of the policy arguments, those arguments could not overcome the statute’s plain language, which is our ‘primary guide’ to Congress’ preferred policy.”).<sup>10</sup> Congress’s “preferred policy” here – whether right or wrong – is that an “inventor” under the Patent Act must be a “natural person (*i.e.*, a “human being”).

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<sup>10</sup>Despite the irrelevance of these policy issues to the statutory construction question before this Court, it bears mentioning that the USPTO continues to study the impact of artificial intelligence on current patent regulations, and has engaged the public-at-large in a conversation on the subject. In particular, the USPTO held a conference on artificial intelligence policy in January 2019, and then, in August and October 2019, issued requests for public comment on a whole host of issues related to the intersection of intellectual property policy and artificial intelligence. The USPTO issued a comprehensive report on those comments in October 2020. *See generally Public Views on Artificial Intelligence and Patent Policy*, available at <[https://www.uspto.gov/sites/default/files/documents/USPTO\\_AI-Report\\_2020-10-07.pdf](https://www.uspto.gov/sites/default/files/documents/USPTO_AI-Report_2020-10-07.pdf)> (visited Feb. 24, 2021). It will suffice to say that many commenters did not share plaintiff’s subjective view that allowing artificial intelligence machines to serve as “inventors” was the correct policy choice, or that the question was nearly as simple as plaintiff suggests in his opening memorandum. *See id.* at 6 (identifying comments that highlighted the need to “carefully consider” the practical effects of allowing an artificial intelligence machine to be an inventor).

**CONCLUSION**

For the foregoing reasons, this Court should affirm the USPTO's detailed final decision, concluding that DABUS could not qualify under the Patent Act as an "inventor." As such, this Court should enter summary judgment for defendants, and deny the identical relief sought by plaintiff.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on this date, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system, which will transmit a Notice of Electronic Filing (“NEF”) to the following:

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